

REMARKS

Claims 1-3, 5-13, 16-20, 28-33, 35-49 and 57-59 are pending in the present application. Claims 4, 21-27, 34, 50-56 and 60 are canceled; claims 1, 28, 30, 31 and 57 are amended to incorporate the subject matter of claims 4 and 34; and claims 3, 5, 33 and 35 are amended to delete the phrase "to be performed by the subscriber."

Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 103, Alleged Obviousness of Claims 1-6, 28-36 and 57

The Office Action rejects claims 1-6, 28-36 and 57 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Harlow (U.S. Patent No. 5,206,901) in view of Brennan (U.S. Patent No. 5,329,578). This rejection is respectfully traversed.

With regard to claims 1, 31 and 57, the Office Action states:

Regarding claims 1 and 31, Harlow teaches a method in a communications system for routing a call, the method comprising: receiving a call (see col. 8, line 51); identifying call routing information for the call (this reads on the destination directory number see col. 8, lines 52-60); responsive to identifying call routing information, determining whether a function has been selected for routing the call (the function may read on activating/deactivating of the call forwarding feature or updating/changing the numbers); and responsive to a determination that a function has been selected for routing the call, routing the call using a sequence of destinations associated with the function (see col. 8, lines 36-47).

The claims have been amended to recite that the function is "to be performed by the subscriber" and applicant provided examples of the claimed "function" on page 17 of the amendment filed 6/20/03.

The claimed "*function to be performed by the subscriber*" reads on the shifting or changing the schedule by the user of Brennan as discussed, for example, on col. 8, line 47 – col. 9, line 2. Brennan teaches that the use may be "off sick, on vacation or just running a little late". Thus, the user may modify the schedule and routing tables and this reads on the claimed "*function to be performed by the subscriber*". Thus, if the user is "off sick", calls should not be routed to his/her office that day and if he/she is on vacation, then calls should be routed to the cottage.

Therefore, it would have been obvious to modify the sequence in Harlow, as taught by Brennan, so that the sequence remains updated when a party on the sequence goes on vacation, moves out of the area, ...etc. In both systems, the sequence is never meant to be permanent and must be changed/updated as the user moves, takes vacations...etc.

Claim 57 is rejected for the same reason discussed above with respect to claims 1 and 31.

Office Action dated September 25, 2003, pages 2-3.

Claim 1, which is representative of claims 30, 31 and 57 with regard to similarly recited subject matter, reads as follows:

1. A method in a communications system for routing a call, the method comprising:
 - receiving a call;
 - identifying call routing information for the call;
 - responsive to identifying call routing information, determining whether a function has been selected for routing the call;
 - responsive to a determination that a function has been selected for routing the call, routing the call using a sequence of destinations associated with the function.
 - monitoring results from routing of the call; and
 - automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information. (emphasis added)

Harlow is directed to a system for alerting a plurality of telephones in response to an incoming call. A call is received at a switching service point. The switching service point recognizes the telephone number as a number associated with a group of routing numbers stored in a database. A test is performed to check the line status of each of the telephone lines associated with the routing numbers. An alert is sent to each of the lines that have an idle status. When one of the alerted lines shows an "off hook" status, the call is terminated to that line. In other words, each line in the list of routing numbers that is not busy will be alerted. The call will be terminated to the first line in which the telephone is answered.

* Harlow does not teach or suggest monitoring results from routing of the call, and automatically modifying the call routing information based on the results obtained from monitoring the call routing to form modified call routing information, wherein subsequent calls are routed using the modified call routing information as recited in claims 1, 30, 31 and 57. These features are addressed by the Office Action in rejecting claims 4 and 34. The Office Action alleges these features are taught in column 6, lines 48-55 which reads as follows:

If the destination numbers are determined in decision diamond 210 to be on the same switch, a test is made in decision diamond 212 whether

the primary number is busy. If the primary number is busy, processing proceeds to box 214, where the call is routed to a secondary number. In most circumstances, the secondary number will generally be a voice message. This branch ends in circle 216.

This section simply reiterates that Harlow tests line status upon the determination that the telephone number is associated with a plurality of destination or routing numbers. Harlow merely tries all of the lines listed in a subscriber's database and terminates the call to the first line in which the telephone is answered. Harlow does not even allude to a feature for modifying call routing information based on results from monitoring the call routing wherein subsequent calls are routed using the modified call routing information. To the contrary, Harlow will always try all of the lines listed in a subscriber database every time with the call being terminated to the first line that answers the call.

Moreover, Brennan does not teach or suggest monitoring results from routing of the call, and automatically modifying the call routing information based on the results obtained from monitoring the call routing to form modified call routing information, wherein subsequent calls are routed using the modified call routing information. Brennan is directed to a mobility call management system which routes a call, associated with a personal number, according to the subscribers service profile. Calls to a personal number assigned to the subscriber are routed to a PCS service node. The service node insures that attempts to communicate with the subscriber are handled with appropriate consideration for who is calling.

Although Brennan may teach a call management system, nowhere does Brennan teach or suggest updating the call routing information based on call routing results. To the contrary, Brennan's routing is always based on the user defined profile regardless of any results of previous routing attempts. Thus, neither Harlow nor Brennan, either alone or in combination, teach or suggest all of the features recited in independent claims 1, 30, 31 and 57.

Further, with regard to claim 28, the Office Action states:

Regarding claim 28, Harlow teaches a switch (such as 110, 120 and 130, see Fig.1) comprising: an input for receiving a call for a party; signaling interface for sending a request to a database (175) for call routing information, wherein call routing information from the database includes a calling sequence for a function associated with the party in

response to the party previously selecting the function; and a switch fabric, wherein the call is routed from the input through the switch fabric to an output to a destination returned by the database using the calling sequence for the function (see col. 2, lines 25-53). Also, the claimed "database" which includes calling sequence reads on the tables in Brennan. Brennan teaches that the user will have the ability to shift and make changes to the schedule. Furthermore, in both Brennan and Harlow, the user must have the ability to change and modify any sequence as needed because normally people take a vacation, move, change jobs, change phone number...etc.

Office Action dated September 25, 2003, page 5.

Claim 28 reads as follows:

28. A switch comprising:

an input for receiving a call for a subscriber;
signaling interface for sending a request to a database for call routing information, wherein call routing information from the database includes a calling sequence for a function associated with the subscriber in response to the subscriber previously selecting the function; and
a switch fabric, wherein the call is routed from the input through the switch fabric to an output to a destination returned by the database using the calling sequence for the function wherein the sequence of destinations is automatically modified in response to a success of routing the call to the subscriber to a destination within the sequence of destinations and wherein the sequence of destinations is modified to favor destinations with successful call completions. (emphasis added)

main argument

* As set forth above with regard to claims 1, 30, 31 and 57, neither Harlow nor Brennan, either alone or in combination, teach or suggest modifying the call routing information based on the results obtained from routing the call. Consequently, neither Harlow nor Brennan, either alone or in combination, teach or suggest a switch fabric, wherein the call is routed from the input through the switch fabric to an output to a destination returned by the database using the calling sequence for the function, wherein the sequence of destinations is automatically modified in response to a success of routing the call to the subscriber to a destination within the sequence of destinations, and wherein the sequence of destinations is modified to favor destinations with successful call completions. Thus, for similar reasoning as stated above with regard to claims 1, 30, 31 and 57, neither Harlow nor Brennan, either alone or in combination, teach or suggest all of the features of claim 28.

Moreover, there is no teaching or suggestion in Harlow or Brennan to combine the teachings of these references in any way. Harlow is directed to a system that alerts multiple lines of a call simultaneously while Brennan discloses a system for "hunting" for a subscriber by sequentially placing a phone call to each line in a subscriber's profile. There is no statement in Harlow to the effect that it would be desirable to alert each line sequentially using a time schedule as a basis for alerting a particular line. Similarly, there is no teaching or suggestion in Brennan to alert a series of lines of a call simultaneously and terminate the call to the first line that communicates an "off the hook" status. These teachings are mutually exclusive and cannot be combined in the manner alleged by the Office Action.

In view of the above, Applicants submit that neither Harlow nor Brennan, either alone or in combination, teach or suggest each and every feature of independent claims 1, 28, 30, 31 and 57 as required under 35 U.S.C. § 103(a). At least by virtue of their dependency on claims 1, 28, 30, 31 and 57, neither Harlow nor Brennan, either alone or in combination, teach or suggest each and every feature of dependent claims 2-6, 29 and 32-36. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-6, 28-36 and 57 under 35 U.S.C. § 103(a).

Furthermore, with regard to claim 6, neither Harlow nor Brennan, either alone or in combination teach or suggest monitoring results from routing of the call to the subscriber and automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information for similar reasoning as set forth above with respect to claims 1, 30, 31 and 57. The Office Action alleges this feature is taught column 8, lines 35-47 of Harlow, which reads as follows:

For example, it would be a trivial matter to program a processor in a switch to apply ringing to a telephone for a period of time, five rings, for example, and then place a call to a second telephone number. This would be useful in situations where an elderly person is living alone at the primary number, and a relative or neighbor monitors the secondary telephone number. The relative would be alerted to those times when the elderly person did not answer the phone. Additionally, an incoming call may be bridged to both the primary and secondary telephones at the switching system, so that if the secondary telephone is answered first, the

primary telephone may be answered for a predetermined time period afterwards.

This section merely teaches routing a call to a primary telephone initially and then routing the call to a secondary telephone if the primary telephone is not answered within a predetermined number of rings. Alternatively, the call may be routed to both the primary and secondary telephone simultaneously. There is nothing in this section or any other section of Harlow that even suggests automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information. In fact, the call routing information remains the same. The primary telephone is not changed to the secondary telephone and vice versa, for example, based on any monitoring of the results from routing the call to the subscriber. Thus, neither Harlow nor Brennan, either alone or in combination teach or suggest monitoring results from routing of the call to the subscriber and automatically modifying the call routing information based on the results to form modified call routing information, wherein subsequent calls are routed using the modified call routing information.

II. 35 U.S.C. § 103, Alleged Obviousness of Claims 7-13, 37-44 and 58

The Office Action rejects claims 7-13, 37-44 and 58 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Foladare et al (U.S. Patent No. 6,330,322). This rejection is respectfully traversed.

With regard to claims 7, 37, 43 and 58, the Office Action states:

Claims 7 and 43 recite a method in a communications system for call routing a call, the method receiving a call to a subscriber; routing the call to the subscriber using a sequence of destinations associated with the subscriber; and responsive to a success of routing the call to the subscriber to a destination within the sequence of destinations, automatically modifying the sequence of destinations used to call the subscriber, wherein the sequence of destinations is modified to favor destinations with successful call completions.

Foladare teaches routing the call to the current location of the subscriber based on retrieving messages from the current location. It does not explicitly teach routing to the current location based on the success of routing a call. However, there is more than one method that may be used to update the current location of the user (e.g., when user makes an

outgoing call or receives an incoming call). The motivation is to always use the current location of the user to increase the success rate of reaching the user.

Office Action dated September 25, 2003, page 8.

Claim 7, which is similar to claims 37, 43 and 58 with regard to similarly recited subject matter, reads as follows:

7. A method in a communications system for call routing a call, the method comprising:
receiving a call to a subscriber;
routing the call to the subscriber using a sequence of destinations associated with the subscriber; and
responsive to a success of routing the call to the subscriber to a destination within the sequence of destinations, automatically modifying the sequence of destinations used to call the subscriber, wherein the sequence of destinations is modified to favor destinations with successful call completions. (emphasis added)

Foladare is directed toward a system for updating a subscriber's current telephone number in response to a revertive call being placed by a subscriber from a particular location. When a party attempts to bridge a call, the system first determines whether the party is a subscriber, and if so, determines whether the subscriber is calling from the telephone number stored in the subscriber's profile. If the subscriber is calling from a telephone number other than what is stored in the subscriber's profile, the subscriber is queried as to whether he or she wants to be contacted at the current phone number. The following section of Foladare gives a more thorough description of the revertive call system:

When a revertive call is received by a system from a subscriber, the subscriber's number is identified and compared to a default number in the subscriber's profile. The call is connected and the system checks whether the telephone number is the same as the number stored in the subscriber's profile. If the subscriber's number is different than the number stored in the subscriber's profile, after the call is terminated, the system queries the subscriber as to whether the subscriber would like to have calls forwarded to his or her current telephone number for a particular length of time. If the subscriber indicates that he or she would like to have calls forwarded to his or her current telephone number for a particular period of time, the subscriber's telephone number will be stored in the subscriber's profile so that all future pages or calls will be forwarded to that number, thus obviating the need for the subscriber to constantly place revertive calls from the same location. (Column 1, lines 28-47).

Foladare does not teach or suggest automatically modifying the sequence of destinations used to call the subscriber in response to a success of routing the call to the subscriber at a destination within the sequence of destinations wherein the sequence of destinations is modified to favor destinations with successful call completions. The Office Action admits that Foladare does not teach or suggest this feature. However, the Office Action alleges that the addition of this feature to Foladare would only require an obvious modification. Applicants respectfully disagree and request that the Examiner cite a reference that teaches a sequential call management system which routes calls to the subscriber using a sequence of destinations and automatically modifies the sequence of destinations used to call the subscriber in response to a success of routing the call to the subscriber to a destination within the sequence of destinations.

Foladare does not even allude to automatically modifying the sequence of destinations used to call the subscriber in response to a success of routing the call to the subscriber to a destination within the sequence of destinations wherein the sequence of destinations is modified to favor destinations with successful call completions. Although Foladare may update the current phone number of a subscriber, the update is not made in response to a success of routing the call to the subscriber. In Foladare, the telephone number update is initiated when a revertive call is received from a subscriber. The system of Foladare then queries the subscriber as to whether he or she wants to be contacted at the current phone number. Thus, the telephone number update is not done in response to a success of routing a call to a subscriber. Rather, Foladare teaches to update the phone number in response to the subscriber commanding the system to do so.

Furthermore, Foladare does not teach or suggest a sequence of destinations. To the contrary, only one subscriber telephone number is contacted, either the number stored in the subscribers profile or a current telephone number other than the telephone number stored in the subscriber's profile. This does not constitute a sequence of destinations. Foladare does not try to, for example, contact the subscriber at the current number and if he or she is not available at that number, try to contact the subscriber at the number stored in the subscriber's profile.

In addition, the telephone number modification feature of Foladare is not an automatic process. As set forth above, Foladare teaches to update the telephone number in response to the subscriber commanding the system to do so. In contradistinction, the present invention monitors call completion success. If a call is successfully completed to a subscriber then the sequence of destinations is modified to favor destinations with successful call completions. No such feature is even suggested in Foladare.

Moreover, since the Examiner fails to cite any reference that teaches or suggests all of the specific features of claims 7, 37, 43 and 58, and merely makes an allegation without supporting evidence, the Examiner has failed to establish a prima facie case of obviousness with regard to claims 7-13, 37-44 and 58. Thus, unless the Examiner is able to cite a reference in support of the allegation, then Applicants' are entitled to a grant of patent on claims 7-13, 37-44 and 58.

Furthermore, it would not be obvious to one of ordinary skill in the art to incorporate the above features into the Foladare invention. The telephone number update of Foladare is not in response to a success of routing a call to a subscriber. Moreover, one of ordinary skill in the art, presented with only Foladare, and without prior knowledge of the applicants claimed invention, would not have found it obvious to incorporate the feature of automatically modifying the sequence of destinations used to call the subscriber in response to a success of routing the call to the subscriber at a destination within the sequence of destinations wherein the sequence of destinations is modified to favor destinations with successful call completions. Thus, the alleged modification can only be the result of impermissible hindsight reconstruction using Applicants' own disclosure as a guide. While Applicants understand that all examination entails some measure of hindsight, when the rejection is based completely on hindsight, as in the present case, to the exclusion of what can be gleaned from the references, then the rejection is improper and should be withdrawn.

In view of the above, Applicants submit that Foladare does not teach or suggest each and every feature of independent claims 7, 37, 43 and 58 as required under 35 U.S.C. § 103(a). At least by virtue of their dependency on claims 7, 37, 43 and 58, Foladare does not teach or suggest each and every feature of dependent claims 8-13, 38-

42 and 44. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 7-13, 37-44 and 58 under 35 U.S.C. § 103(a).

Furthermore, with regard to claim 8, Foladare does not teach or suggest that the sequence of destinations is modified to favor destinations with a selected level of call completions. The Office Action admits that Foladare does not teach this feature. However, the Office Action alleges that the addition of this feature to Foladare would only require an obvious modification. Applicants respectfully disagree and request that the Examiner cite a reference that teaches a sequential call management system wherein the sequence of destinations is modified to favor destinations with a selected level of call completions.

Foladare does not teach or suggest modifying the sequence of destinations to favor destinations with successful call completions as set forth above with regard to claims 7, 37, 43 and 58. Consequently, Foladare also does not teach or suggest modifying the sequence of destinations to favor destinations with a selected level of call completions. Although Foladare may update the current phone number of a subscriber, the update is not made in response to a success of routing the call to the subscriber. In Foladare, the telephone number update is initiated when a revertive call is received from a subscriber. The system of Foladare then queries the subscriber as to whether he or she wants to be contacted at the current phone number. Thus, the telephone number update is not done in response to a success of routing a call to a subscriber. Rather, Foladare teaches to update the phone number in response to the subscriber commanding the system to do so.

In addition, with regard to claims 9 and 38, Foladare does not teach or suggest a sequence of destinations as set forth above with regard to claims 7, 37, 43 and 58. Consequently, Foladare does not teach or suggest modifying the sequence of destinations to include the origin as a destination within the sequence of destinations responsive to detecting initiation of a call by the subscriber from an origin absent from the sequence of destinations.

Moreover, since the Examiner fails to cite any reference that teaches or suggests the specific features of claims 8, 9 and 38 and merely makes an allegation without supporting evidence, the Examiner has failed to establish a prima facie case of

obviousness with regard to claim 8, 9 and 38. Thus, unless the Examiner is able to cite a reference in support of the allegation, then Applicants are entitled to a grant of patent on claim 8, 9 and 38.

III. 35 U.S.C. § 103, Alleged Obviousness of Claims 16-18, 45-47 and 59

The Office Action rejects claims 16-18, 45-47 and 59 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Arbel (U.S. Patent No. 5,276,731). This rejection is respectfully traversed.

With regard to claims 16, 45 and 59, the Office Action states:

Regarding claim 16, Arbel discloses a method and apparatus for handling incoming telephone calls and, in particular for transferring calls from a first target to a second target (see table in col. 10 lines 10-28).

However, Arbel does not teach the feature of the transferring calls to a third target.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the feature of transferring from a first target to a second target and further into a third target destination. This simply expands the services to include more destinations.

Office Action dated September 25, 2003, page 10.

Claim 16, which is representative of claims 45 and 59 with regard to similarly recited subject matter, reads as follows:

16. A method in a communications system for call routing a call, the method comprising:

- receiving a call to a subscriber;
- identifying a time of the call;
- routing the call to the first destination in an ordered set of destinations for the subscriber based on the time of the call;
- responsive to an absence of an answer of the call at the first destination, routing the call to a second destination in the ordered set of destinations;
- responsive to an absence of an answer of the call at the second destination, routing the call to a third destination in the ordered set of destinations; and
- responsive to an answer of the call at the third destination for a number of times, selecting the third alternate destination as the first alternate destination. (emphasis added)

Arbel is directed to a system for handling incoming phone calls automatically. Arbel focuses on three specific problems: (a) delivering predetermined messages to predetermined calling parties; (b) predetermined, prioritized screening of incoming telephone calls; and (c) re-routing incoming telephone calls on the basis of predetermined selection. Arbel does not teach or suggest selecting the third alternate destination as the first alternate destination in response to an answer of the call at the third destination for a number of times. The Office Action alleges that this feature is taught in the following section of Arbel:

In a second example, assume Peter Parker is a third shift foreman at Web Industries. Parker sets up a selective call re-routing entry in the database to transfer his incoming calls to the other foremen when it is not his shift. If the call is being transferred, but is not answered by the foreman, the call is transferred to a second target, the operator. Parker's selection criteria are based only on the time and the day of the week. (Column 10, lines 11-19)

This section merely discloses a system which transfers a call to a second target system in response to an un-answered call to a first target system. The target systems in which the calls are to be routed to are selected by a user, in this case, Peter Parker. In order for the routing sequence to be altered or updated, the user (Peter Parker) must re-set the call routing information. Arbel does not even hint that the second target system will become the first target system in response to the second target system answering a call a number of times. Thus, Arbel does not teach or suggest selecting the third alternate destination as the first alternate destination in response to an answer of the call at the third destination for a number of times.

Furthermore, there is no teaching or suggestion in Arbel as to the desirability of including this feature. As the Examiner has failed to demonstrate any motivation or incentive to modify Arbel so as to achieve the features recited in claims 16, 45 and 59, the motivation can only be the result of impermissible hindsight reconstruction using Applicant's own disclosure as a guide. Thus, unless the Examiner is able to cite a reference in support of the allegation, then Applicants are entitled to a grant of patent on claims 16-20, 45-49 and 59.

In view of the above, Applicants submit that Arbel does not teach or suggest each and every feature of independent claims 16, 45 and 59 as required under 35 U.S.C. § 103(a). At least by virtue of their dependency on claims 16, 45 and 59, Arbel does not teach or suggest each and every feature of dependent claims 17-20 and 46-49. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 16-20, 45-49 and 59 under 35 U.S.C. § 103(a).

IV. 35 U.S.C. § 103, Alleged Obviousness of Claims 19-20 and 48-49

The Office Action rejects claims 19-20 and 48-49 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Arbel (U.S. Patent No. 5,276,731) in view of Foladare et al (U.S. Patent No. 6,330,322). This rejection is respectfully traversed for at least the same reasons as noted above with regard to claims 16 and 45 from which claims 19-20 and 48-49 depend.

Arbel fails to teach or suggest all of the claim limitations recited in claims 16 and 45 from which claims 19-20 and 48-49 depend. Specifically, Arbel does not teach or suggest selecting the third alternate destination as the first alternate destination in response to an answer of the call at the third destination for a number of times as set forth above in the arguments regarding claims 16 and 45 and 59.

Furthermore, neither Arbel nor Foladare, either alone or in combination, teach or suggest all of the specific features of dependent claims 19-20 and 48-49. For similar reasoning as noted above with regard to claims 7 and 43, Foladare does not teach or suggest modifying the sequence of destinations used to call the subscriber in response to a particular destination being answered over a period of time. Claims 19-20 and 48-49 recite features consistent with modifying the sequence of destinations in response to a success of routing the call to the subscriber. For example, claims 19 and 48 recite "responsive to the third destination being answered over a period of time, setting the third destination as the second destination." Additionally, claims 20 and 49 recite "responsive to the second destination being answered over a period of time, for setting the second destination as the first destination." Although Foladare may update the current phone number of a subscriber, the update is not made in response to a success of routing the call to the subscriber.

In Foladare, the telephone number update is initiated when a revertive call is received from a subscriber. The system of Foladare then queries the subscriber as to whether he or she wants to be contacted at the current phone number. Thus, the telephone number update is not done in response to a success of routing a call to a subscriber. Rather, Foladare teaches to update the phone number in response to the subscriber commanding the system to do so.

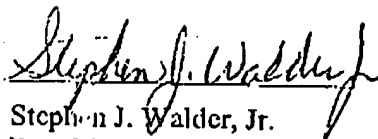
Thus, the rejection to claims 19-20 and 48-49 under 35 U.S.C. § 103(a) is overcome.

V. Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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